MONTHLY WEATHER MAP

METEOROLOGICAL SERVICE

DOMINION OF CANADA

NOVEMBER 1933

TEMPERATURE

Frequent cold waves passed south along the west coast of Hudson Bay. The path of the cold air-masses was considerably to the eastward of the normal seasonal route. As a consequence, the month was considerably colder than a normal November from the Great Lakes of the Mackenzie and Manitoba eastward to the Atlantic coast. The greatest negative departures from normal temperature (twelve to seventeen degrees) occurred on the west coast of Hudson Bay, in northern Ontario and on the highlands of western Quebec. In southern Manitoba, southern Ontario, along the St. Lawrence valley, in Nova Scotia and Prince Edward Island negative departures ranged from four to eight degrees. In New Brunswick they were five to eleven degrees. In some districts of the Atlantic Provinces this was the coldest November in fifty years. Navigation closed on the St. John River on the 16th, or two weeks earlier than last year. There was considerable loss in the Atlantic provinces on account of vegetable and root crops frozen in the ground.

From the Pacific coast the entry of maritime air-masses carried temperatures well above normal in the interior of British Columbia, in Alberta and southern Saskatchewan. Positive deviations were three to ten degrees in the interior of British Columbia, five to eleven degrees in Alberta except the extreme northeast, two to seven degrees in Saskatchewan south of the Churchill river. In the Yukon also, the month was a little warmer than a normal November.

PRECIPITATION

In British Columbia the mild weather was accompanied by much cloud with considerable fog on Vancouver Island and the lower mainland. Precipitation was, however, generally less than the normal amount for November. In the northern interior there was considerable excess while on the north coast the month was abnormally wet. Twenty-five inches were reported at Prince Rupert, forty-two inches at Ocean Falls and forty-eight inches at Swanson Bay. At Prince Rupert the normal amount is thirteen inches, Ocean Falls, nineteen inches and Swanson Bay, twenty-nine inches.

In the Peace River district of Alberta where the normal amount is about three quarters of an inch, there were two and a half to three and a half inches actually reported. Elsewhere in Alberta precipitation was for the most part a little above normal on the plains and somewhat below normal in the foothills.

In Saskatchewan there was a slight excess, while in western Manitoba the amount was about normal, with a slight excess in eastern Manitoba.

In Ontario the precipitation was generally moderately above normal except in the Georgian Bay counties and in the region immediately east of the Lake of the Woods where the excess was rather large.

In Quebec there were local deficiencies in the neighborhood of Montreal and in parts of the Lake St. John region, but elsewhere precipitation was generally well above the normal amount and heavy along the St. Lawrence from Quebec to the Island of Anticosti.

In Nova Scotia, Prince Edward Island and locally in New Brunswick precipitation was greater than the normal amount. In Nova Scotia the excess ranged from twenty to ninety per cent., although at Halifax there was a deficiency of fifteen per cent. In New Brunswick the amounts varied locally from fifty per cent. deficiency to sixty per cent. excess.

A. J. CONNOR

SPECIAL REPORTS

NOTE—Column H is Highest Temperature; Column L is Lowest Temperature; Column P is Precipitation in inches; Column I denotes total of bright sunshine in hours during the month; Column Tm is the mean temperature of the current month; Column Sg denotes depth of snow on ground in inches, where given.

BRITISH COLUMBIA

STATION	H	L	P	I	Tm	STATION	H	L	P	I	Tm	STATION	H	L	P	I	Tm
Estevan Point			12.4		46°	New Westminster	59°	29°	5.4			Nelson	51°	22°	1.4	33	
Sooke	59°	30°	5.6			White Rock	59°	30°	3.7			Kaslo	50°	24°	1.8		38°
Port Alberni	64°	30°	3.7			Chilliwack	57°	25°	5.6			Cranbrook	55°	15°	1.0		
Victoria	55°	36°	3.9	44	46°	Summerland	59°	25°	1.1	46		Golden	54°	11°	1.5		
Shawnigan Lake	60°	29°	3.8			Okanagan Centre	62°	28°	1.0			Glacier	38°	12°	3.3		
Duncan	62°	25°	3.4			Vernon	53°	25°	1.5	27		Prince George	57°	23°	2.6	37	39°
Cowichan Bay	55°	30°	3.0	53		Kamloops	58°	26°	0.5	33	40°	Ocean Falls			42.4		
Nanaimo	55°	33°	2.7	60		Salmon Arm	59°	23°	1.4	21		Swanson Bay			48.2		
Courtenay			2.8			Greenwood	51°	12°	0.0			Prince Rupert	56°	32°	25.5	16	43°
Vancouver	57°	30°	5.4	43	45°												

ALBERTA

STATION	H	L	P	I	Tm	Sg	STATION	H	L	P	I	Tm	Sg
Beaverlodge	54°	4°	3.4	38	31°		Seven Persons			1.3			
Fairview	46°	-7°	2.8	24	24°		Waterton Park			1.1			
Peace River	45°	-10°	1.3		22°		Winnifred			1.2			
Entrance	64°	9°	0.8				Alix	62°	-2°	0.7		33°	
Grouard	51°	-5°	2.0		26°		Hanna	54°	3°	0.2		32°	
Slave Lake	50°	-3°	2.3		27°		Harmattan	62°	-7°	0.3		32°	
Exshaw	61°	9°	0.7		37°		Hillsdown	56°	0°	0.6		34°	
Lake Louise	60°	-5°	0.5		28°		Jenner	58°	-3°	0.6		31°	
Brooks			0.6				Olds	57°	7°	0.5		33°	
Calgary	66°	0°	0.5	117	35°		Perbeck	55°	-6°	0.2		31°	
Cardston	64°	8°	0.7		37°		Springdale	53°	-7°	0.7		32°	
Claresholm			0.9				Stettler	56°	4°	0.5		30°	
High River	64°	0°	1.4		37°		Three Hills	58°	-8°	0.2		29°	
Lethbridge	63°	-5°	0.8	101	36°	0	Campsie	55°	-4°	1.2		30°	
Macleod	62°	0°	0.9		38°		Edmonton	52°	10°	1.1	42	32°	T
Maycroft			0.2				Elk Point	45°	-7°	1.3		23°	
Medicine Hat	62°	0°	0.9	72	34°	0	Ranfurly	47°		0.8		28°	
Pincher Creek	61°	4°	0.6		37°		Rocky Mountain House	56°	3°	1.7		23°	
Strathmore	59°	-5°	0.5		32°		Wetaskiwin	56°	3°	0.6		33°	
Beaver Mines			0.6				Wabamun			1.2			
Cowley			0.7										

SASKATCHEWAN

Battleford	50°	-14°	0.8		24°	T	Chaplin	50°	1°	0.1		28°	
Biggar	52°	-2°			26°		Dundurn	46°	-7°	0.5		24°	
Rosetown	45°	-4°	1.0		24°		Swift Current	58°	3°	0.5	81	33°	
Waseca	46°	-8°	1.3		25°		Pennant	55°	9°	0.4		32°	
Brooksby	45°	-21°	0.9		15°		Leitchville			0.4			
Prince	44°	-18°	0.4		21°		Gravelbourg	56°	-2°	0.5		30°	
Scott	48°	-13°	0.7	68	25°		Regina	59°	-3°	0.8		24°	
St. Walburg	44°	-15°	0.8		20°		Moose Jaw	52°	0°	0.7	80	29°	
Prongua			0.5				Qu'Appelle	50°	1°	0.9	72	24°	T
Prince Albert	46°	-11°	1.3		18°	6	Indian Head	50°	1°	1.3		23°	
Kamsack	40°	-5°	0.6		16°		Yellow Grass	55°	2°	0.5		28°	
Lestock	43°	-8°	1.5		20°		Grenfell	49°	3°	1.0		24°	
Pilger	43°	-12°	1.8		18°		Francis	50°	4°	0.5		26°	
Dana	43°	-7°	1.2		20°		Whitewood	47°	2°	0.9		23°	
Muenster	40°	-13°	0.4		17°		Carlyle	44°	9°	1.2		23°	
Nipawin	47°	-21°	2.5		15°		Midale	52°	1°	0.9		27°	
Saskatoon	47°	-6°	0.4		23°		Lumsden	49°	-2°	0.5		27°	
Leader	56°	-9°			28°		Ft. Qu'Appelle	52°	-6°	0.9		24°	
Climax			0.6				Rockglen			0.5			
Outlook	56°	-1°	0.4		27°		Strongfield			0.4			
Caron	56°	-7°	0.6		28°		Ceylon			0.5			
Shaunavon	59°	0°			33°		Lintlaw	42°	-10°	1.1		17°	

MANITOBA

Hamiota	40°	2°					Morris	42°	-1°	0.6			6
Brandon	43°	-2°	1.2	76	20°	9½	Graysville	42°	-6°	0.6			4
Russell	38°	-6°	0.6				Sprague	34°	-26°	1.4			
Minnedosa	42°	-7°	0.9		18°	4	Winnipeg	38°	-16°	1.7	50	17°	8
Treesbank (St. Albans)	43°	-3°	1.6			6	Bissett	34°	-20°	2.3		12°	
Treherne	42°	-4°	1.7			4	Great Falls	37°	-24°	1.8			
Ninette	44°	0°	1.1				Aitkensville	37°	-20°	3.2			
Morden (Experimental Farm)	45°	-6°	1.1	67	22°		Dauphin	46°	-5°	1.0		18°	½
							Le Pas	41°	-22°	2.6		9°	

ONTARIO

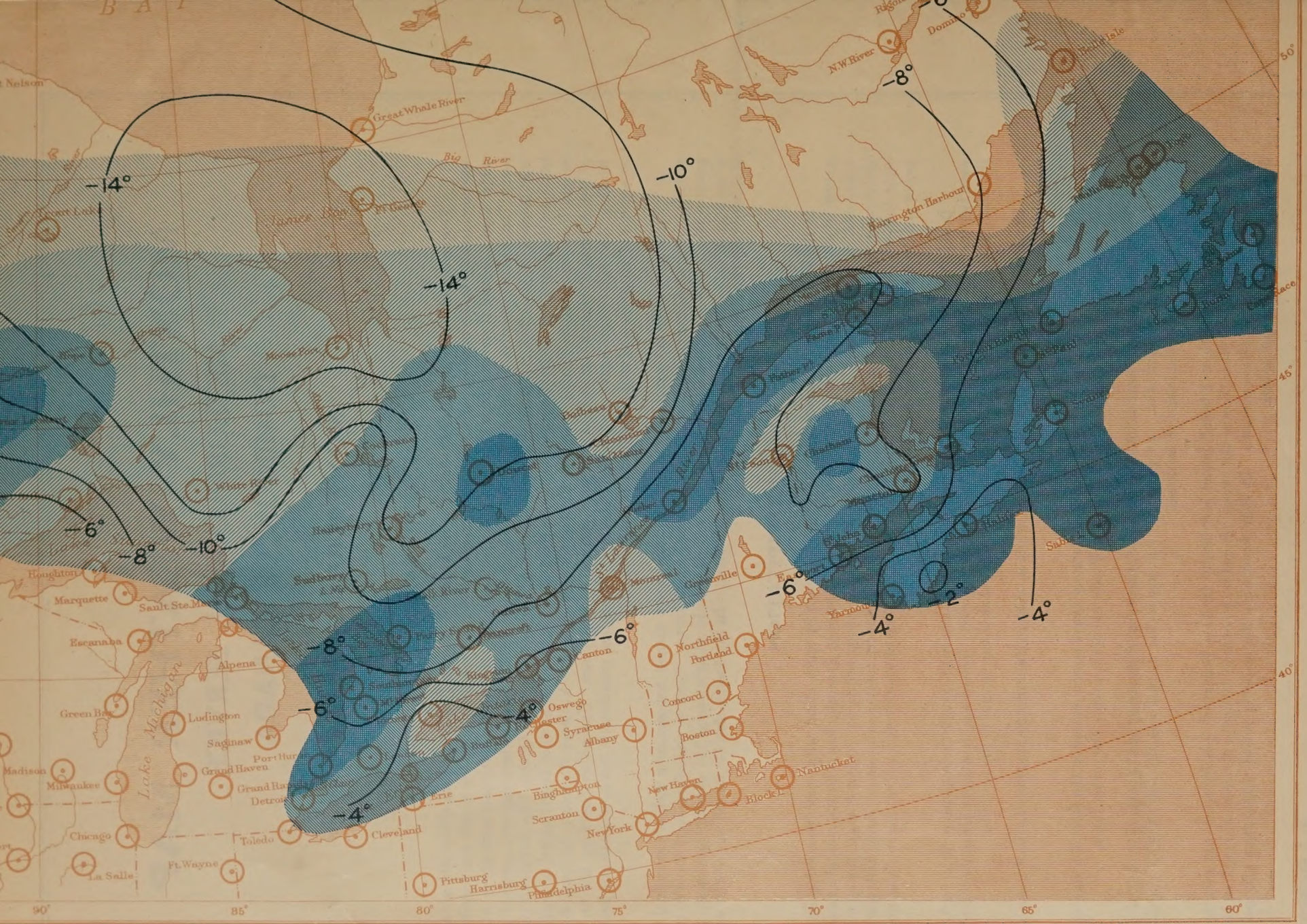
STATION	H	L	P	I	Tm	Sg.	STATION	H	L	P	I	Tm	Sg.
Kenora	45°	-14°	2.6				Barrie	70°	-3°	5.5	58	27°	2
Sioux Lookout			4.6		13°	19	Beeton	70°	-16°	1.9		30°	0
Quorn	39°	-25°	1.9			28	Alton	71°	-8°	4.1		26°	
Longlac	37°	-25°	3.1				London	74°	4°	4.8		32°	0
Ignace	47°	-22°	5.8				Woodstock	72°	2°	4.9	78	31°	0
Port Arthur	47°	-10°	2.1		21°	15	Paris	74°	1°	3.9		36°	0
Kapuskasing	38°	-33°	3.7		8°		Brucefield	70°	10°	4.0		27°	0
Timmins	60°	-13°	2.6			24	Simcoe	76°	3°	4.8		34°	0
Haileybury	59°	-14°	3.1	55	16°	12	Harrow	78°	7°	2.2	86	35°	
White River	52°	-28°	2.8		10°	12	St. Catharines	64°	8°	2.8	66	33°	
Franz	53°	-30°	4.6			20½	Toronto	61°	6°	2.9	91	32°	0
Montreal River	67°	-21°	4.0				Bloomfield	50°	0°	4.6			0
North Bay	63°	-14°	3.2		20°		Peterboro'	70°	-8°	3.4			T
Providence Bay	56°	-2°	4.0				Queensboro'	65°	-10°	3.4			0
Parry Sound	66°	-7°	5.1		25°	3	Kingston	59°	4°	3.4	85	30°	0
Southampton			4.9		30°	T	Brockville	50°	0°	3.8	77	26°	
Lucknow	71°	-9°	5.6				Morrisburg	67°	10°				0
Beatrice	69°	-13°	4.2		22°		Ottawa	67°	-2°	3.4	78	24°	4
Walkerton	75°	-13°	5.7		28°	0	Ottawa (Exp. Farm)	64°	-9°	3.5	58	20°	5
Mount Forest	73°	-17°	3.8	58	28°	T	Renfrew	62°	-10°	2.8		18°	4
							Pembroke	72°	-5°	2.4		22°	10

QUEBEC

Cedars	58°	2°	2.4		24°	0	St. Joachim	53°	-7°	3.7		23°	10
Macdonald College	58°	0°	4.0		25°	2	Donnacona	47°	-5°	5.0		24°	24
Montréal	56°	5°	2.9	65	25°	5	Québec	57°	-2°	4.0	92	23°	12
Farnham	62°	-7°	3.2	59	25°	0	Cap Rouge	57°	-5°	4.0	80	23°	12
Brome	64°	-13°	3.8		24°	0	Ste. Anne de la Pocatiére	63°	-3°	3.9	83	22°	
Lennoxville	65°	-12°	3.3	76	24°	½	Armagh	60°	-4°	4.4			
Sherbrooke	56°	-3°	3.0	71	26°	T	Albanel	42°	-22°	2.8	72		15
Beauceville	45°	-4°	2.3		22°		La Ferme	51°	-28°	3.9	82	10°	22
Sorel	48°	-6°	2.8		22°	6	Roberval	60°	-26°	2.9		14°	30
Lake Mégantic	63°	-1°	2.2		24°	4	Doucet			4.7	31	12°	30
Drummondville	62°	-9°	3.7		20°	½	Anticosti			4.4		23°	
St. Lin de Laurentides	46°	-12°	2.5		18°	12	Father Point			4.8		22°	
St. Gabriel de Brandon	40°	-12°	3.4			16	Harrington Harb'r			0.6		20°	12
Joliette	55°	-9°	1.6		21°		Fame Point	49°	8°	6.2		24°	10
Huberdeau	58°	-10°	4.4		21°	5½	Grindstone	56°	14°	4.2		30°	3
Maniwaki	56°	-16°	6.3		21°	10	Sanmaur	54°	-20°	3.7		12°	21
Mont Laurier	61°	-8°	5.0		20°	30	Abitibi	58°	-21°	3.4		13°	17½
							Dolbeau	52°	-30°	4.1		14°	18

ATLANTIC PROVINCES

Saint John	54°	9°	4.0	104	30°	T	Woodstock	64°	-5°	3.2		24°	2
Aroostook	60°	-10°	3.7		21°	6	Digby	61°	14°	6.6		34°	
Bathurst	51°	-11°	2.4		21°	7	Halifax	55°	14°	4.7		35°	
Chatham	58°	-12°	3.3		24°	4	Kentville (Experimental Farm)	58°	3°	6.4	68	30°	
Chipman	58°	-10°	4.8		23°		Liverpool	57°	7°	7.5		36°	
Fredericton	62°	-4°	3.9	110	25°	2	Nappan	58°	2°	5.2	76	28°	
Fredericton (Experimental Farm)	62°	-5°	3.5	115	26°	1	St. Paul Island			4.4		31°	
Gagetown	59°	-5°	4.2		27°		Sydney	58°	14°	6.7		33°	
Harvey	60°	-3°	4.2			3	Upper Stewiacke	63°	5°	4.4		33°	
Moncton	59°	-4°	3.3		25°		Wolfville	59°	7°	6.8	80	32°	T
Musquash	54°	4°	4.8		28°		Yarmouth	58°	18°	5.1		36°	
McAdam Junction	63°	-1°	4.9		25°	1	Charlottetown	55°	13°	4.6		30°	½
Nepisiquit Falls	50°	-20°	1.8		20°		Charlottetown (Experimental Farm)	55°	12°	4.5	69	29°	
Richibucto	59°	-5°	2.7		25°		Cape Race, Nfld.	42°	29°	7.7		36°	
Sussex	61°	-1°	4.4		28°								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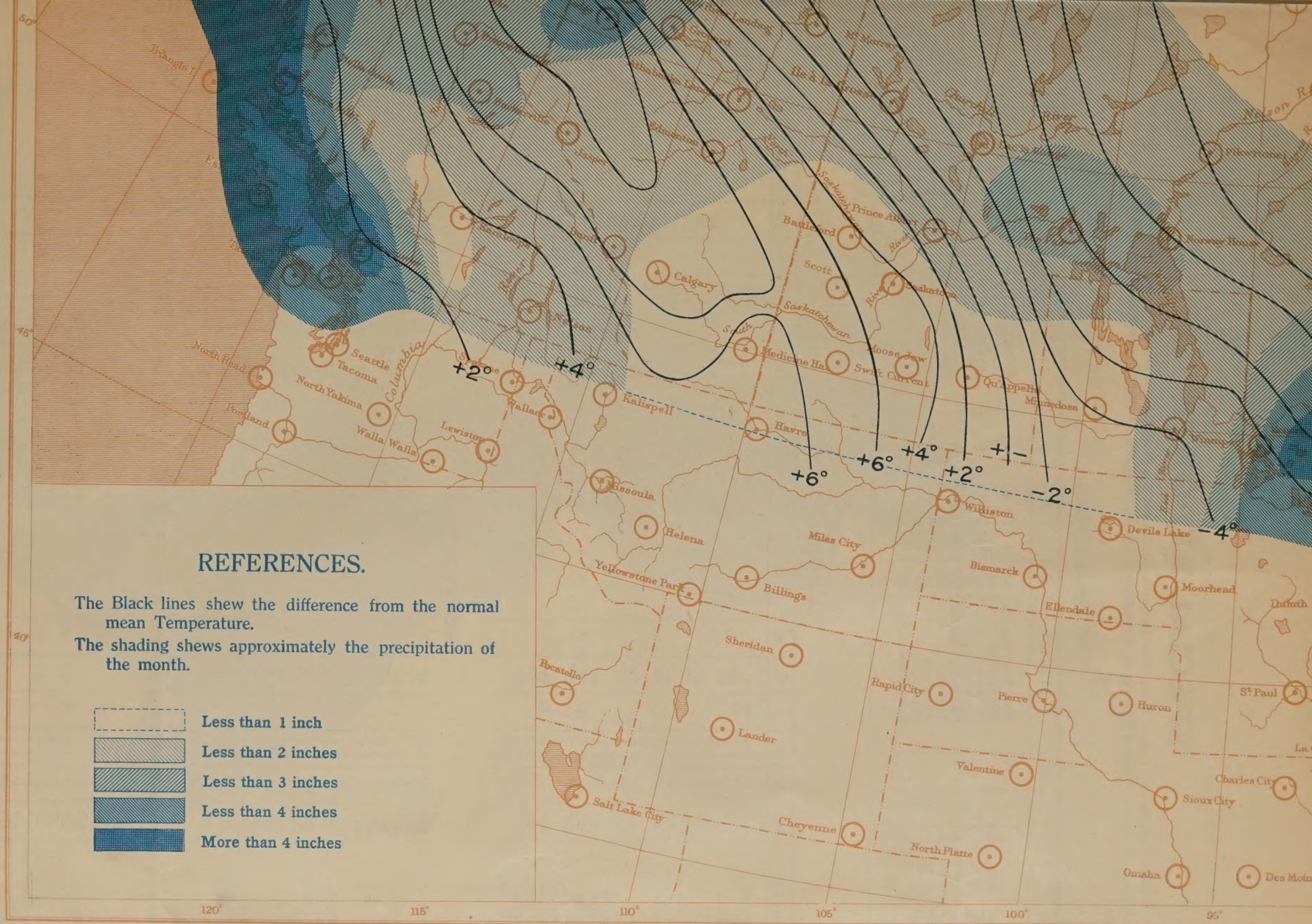
Great Whale River
Big River
N.W.River
Harrington Harbour
Houghton
Marquette
Escanaba
Alpena
Green Bay
Ludington
Saginaw
Grand Haven
Milwaukee
Chicago
Toledo
Cleveland
La Salle
Ft.Wayne
Lake Michigan
Oswego
Syracuse
Albany
Binghampton
Scranton
New York
Pittsburg
Harrisburg
Philadelphia
Northfield
Portland
Concord
Boston
Nantucket
New Haven
90°
85°
80°
75°
70°
65°
60°
50°
45°
40°

DOMINION OF CANADA.

R MAP

1933

erature; and total precipitation of the month.



REFERENCES.

The Black lines shew the difference from the normal mean Temperature.

The shading shews approximately the precipitation of the month.

- Less than 1 inch
- Less than 2 inches
- Less than 3 inches
- Less than 4 inches
- More than 4 inches

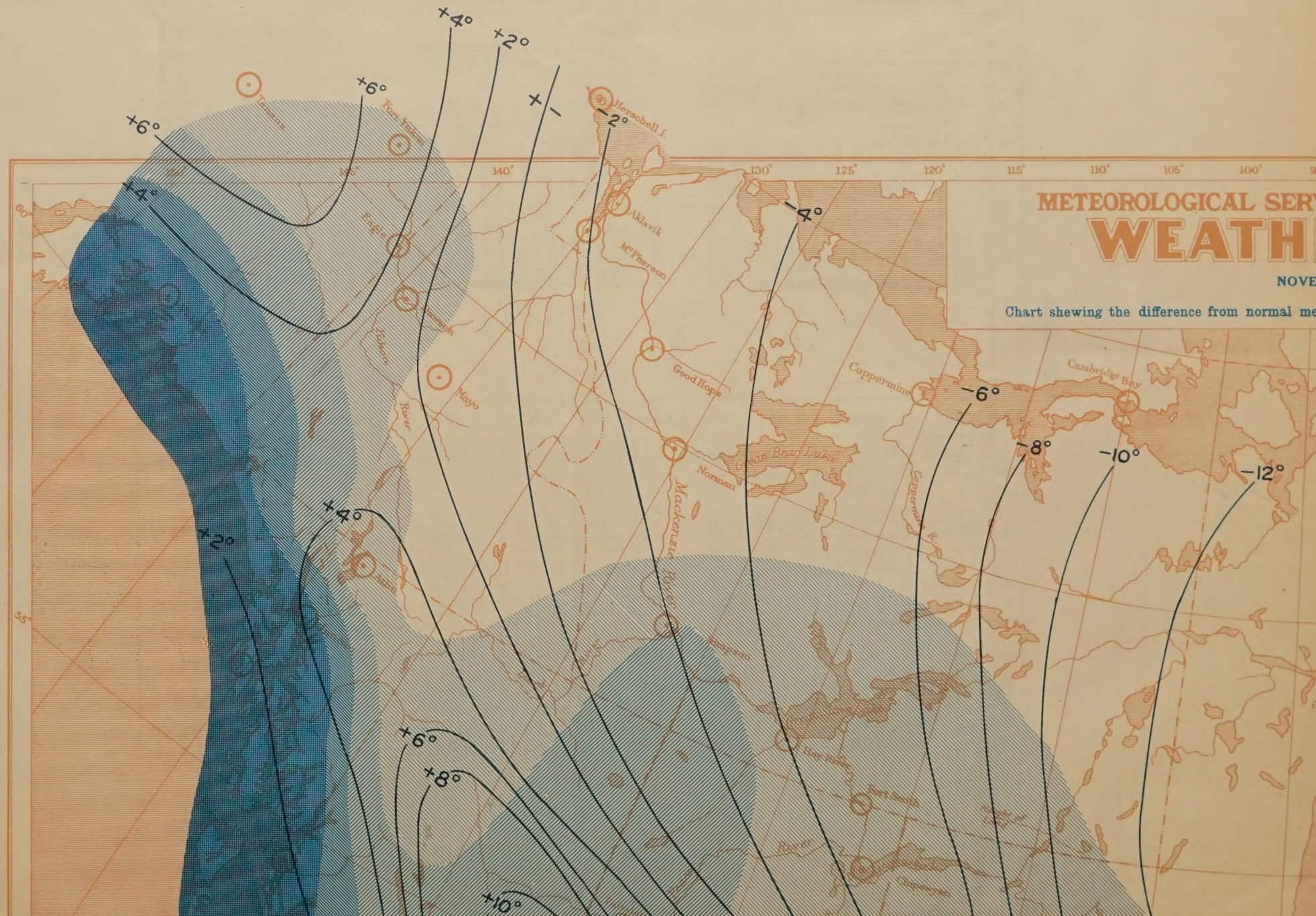

METEOROLOGICAL SER
WEATH
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Chart shewing the difference from normal me
+4°
+2°
+1
−2°
+6°
+6°
+4°
−4°
−6°
−8°
−10°
−12°
+4°
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+10°
Herschell I.
Aklavik
McPherson
Good Hope
Mayo
Coppermine
Cambridge Bay
Great Bear Lake
Norman
Mackenzie River
Fort Yukon
Eagle
Dawson
Fort Simpson
Fort Resolution
Peace River
Athabasca
Battle
Coppermine River
130°
125°
120°
115°
110°
105°
100°
60°
55°